

Express Letter

Earth and Planetary Science Letters 181 (2000) 641-643

EPSL

www.elsevier.com/locate/epsl

Contents Volume 181

Chlorine-36 evidence for the Mono Lake event in the Summit GRIP ice core G. Wagner, J. Beer, C. Laj, C. Kissel, J. Masarik, R. Muscheler and HA. Synal	1
Regular Letters	
Geomagnetic paleointensity variation with a 100 kyr quasi-period	
Y. Yokoyama and T. Yamazaki	7
Paleoceanographic changes during the early Cretaceous (Valanginian-Hauterivian): evidence from oxygen and carbon stable isotopes	
B. van de Schootbrugge, K.B. Föllmi, L.G. Bulot and S.J. Burns	15
Comparison of carbon, nitrogen and water budgets on Venus and the Earth	
C. Lécuyer, L. Simon and F. Guyot	33
Deep subduction of H ₂ O and deflection of volcanic chain towards backare near triple junction due to lower temperature	
H. Iwamori	41
Geochemical evidence from the Pukapuka volcanic ridge system for a shallow enriched mantle domain beneath the South Pacific Superswell	
P.E. Janney, J.D. Macdougall, J.H. Natland and M.A. Lynch Uranium-series age constraints on lavas from the axial valley of the Mid-Atlantic Ridge, MARK area	47
M.E. Sturm, S.J. Goldstein, E.M. Klein, J.A. Karson and M.T. Murrell	61
Chemical stratification of cratonic lithosphere: constraints from the Northern Slave craton, Canada	
M.G. Kopylova and J.K. Russell	71
Complex geological histories extending for ≥4.0 Ga deciphered from xenocryst zircon microstructures	
D.R. Nelson, B.W. Robinson and J.S. Myers	89
Experimental evidence for the origin of two kinds of inclusions in diamonds from the deep mantle	
T. Gasparik and M.T. Hutchison	103
Hf-Nd isotopic evolution of the lower crust	
J.D. Vervoort, P.J. Patchett, F. Albarède, J. Blichert-Toft, R. Rudnick and H. Downes	115
Thermal effects of ridge subduction and its implications for the origin of granitic batholith and paired metamorphic belts	
H. Iwamori	131
Paleomagnetism of Jurassic and Cretaceous rocks in central Patagonia: a key to constrain the timing of rotations during the	
breakup of southwestern Gondwana?	1.44
S.E. Geuna, R. Somoza, H. Vizán, E.G. Figari and C.A. Rinaldi Refinement of the Messinian APTS from sedimentary cycle patterns in the lacustrine Lava section (Servia Basin, NW	145
Greece)	
J. Steenbrink, N. van Vugt, M.L. Kloosterboer-van Hoeve and F.J. Hilgen	16
The permutation test as a non-parametric method for testing the statistical significance of power spectrum estimation in	10
cyclostratigraphic research	
E. Pardo-Iguzquiza and F.J. Rodríguez-Tovar	17:
The dip of the foreland monocline in the Alps and Apennines	17.
G. Mariotti and C. Doglioni	19
Analysis of Variscan dynamics; early bending of the Cantabria–Asturias Arc, northern Spain	17
J.M. Kollmeier, B.A. van der Pluijm and R. Van der Voo	20
Tectonic vs. shallow origin of geodetically inferred ground movements: an NE Ardenne (Belgium) case	
A. Demoulin, B. Vliegen and R. Charlier	21
Basin scale natural gas source, migration and trapping traced by noble gases and major elements: the Pakistan Indus basin	
A. Battani, P. Sarda and A. Prinzhofer	229

Bubble growth in rhyolitic melt	
Y. Liu and Y. Zhang	251
Discussion	
Comment on 'Response of Lake Baikal ecosystem to climate forcing and pCO2 change over the Last Glacial/Interglacial	
transition	
M.A. Grachev Challenges in constructing the age model for the Lake Baikal cores during the last glacial/interglacial transition: the	265
response to M.A. Grachev	
A.A. Prokopenko	267
- Art Arton prime	201
Express Letter	
Oxygen isotopes in calcium-aluminum-rich inclusions from enstatite chondrites: new evidence for a single CAI source in the	
solar nebula	
Y. Guan, K.D. McKeegan and G.J. MacPherson	271
Regular Letters	
Magnetic properties of aggregate polycrystalline diamond: implications for carbonado history	
G. Kletetschka, P.T. Taylor, P.J. Wasilewski and H.G.M. Hill	279
Partitioning of rare earth elements between CaSiO3 perovskite and coexisting phases: constraints on the formation of	
CaSiO ₃ inclusions in diamonds	
W. Wang, T. Gasparik and R.P. Rapp	291
On the role of microbes in the alteration of submarine basaltic glass: a TEM study	201
J.C. Alt and P. Mata Changes in erosion and ocean circulation recorded in the Hf isotopic compositions of North Atlantic and Indian Ocean	301
ferromanganese crusts	
A.M. Piotrowski, DC. Lee, J.N. Christensen, K.W. Burton, A.N. Halliday, J.R. Hein and D. Günther	315
The significance of monazite U-Th-Pb age data in metamorphic assemblages; a combined study of monazite and garnet	
chronometry	
G. Foster, P. Kinny, D. Vance, C. Prince and N. Harris	327
Incompatible trace element partitioning and residence in anhydrous spinel peridotites and websterites from the Ronda	
orogenic peridotite C.J. Garrido, JL. Bodinier and O. Alard	341
Contrasting lithospheric mantle domains beneath the Massif Central (France) revealed by geochemistry of peridotite	.7-41
xenoliths	
X. Lenoir, C.J. Garrido, JL. Bodinier and JM. Dautria	359
Origin and evolution of 'intracratonic' thermal fluids from central-western peninsular India	
A. Minissale, O. Vaselli, D. Chandrasekharam, G. Magro, F. Tassi and A. Casiglia	377
Thermal structure of continental upper mantle inferred from S-wave velocity and surface heat flow	
A.H.E. Röhm, R. Snieder, S. Goes and J. Trampert Structure of the crust and uppermost mantle of Iceland from a combined seismic and gravity study	395
F.A. Darbyshire, R.S. White and K.F. Priestley	409
High-resolution paleomagnetic records from Holocene sediments from the Palmer Deep, Western Antartic Peninsula	40)
S. Brachfeld, G.D. Acton, Y. Guyodo and S.K. Banerjee	429
The Neuquén composite section: magnetostratigraphy and biostratigraphy of the marine lower Jurassic from the Neuquén	
basin (Argentina)	
M.P.I. Llanos and A.C. Riccardi	443
An oxygen barometer with the assemblage garnet-epidote	4.50
C.L. Donohue and E.J. Essene	459
Regular Letters	
Late Eocene impact ejecta: geochemical and isotopic connections with the Popigai impact structure	
J. Whitehead, D.A. Papanastassiou, J.G. Spray, R.A.F. Grieve and G.J. Wasserburg	473
Effects of pH and salinity on the intensity of magnetization in redeposited sediments	
K. Katari and L. Tauxe The 'Tortonian salinity crisis' of the eastern Betics (Spain)	489
W. Krijgsman, M. Garcés, J. Agustí, I. Raffi, C. Taberner and W.J. Zachariasse	497

Contents Earth and Planetary Science Letters 181 (2000) 641-643	643
Global ice volumes at the Last Glacial Maximum and early Lateglacial	
K. Lambeck, Y. Yokoyama, P. Johnston and A. Purcell	513
Ice formation in subglacial Lake Vostok, Central Antarctica	
R. Souchez, J.R. Petit, JL. Tison, J. Jouzel and V. Verbeke	529
Non-hotspot formation of volcanic chains: control of tectonic and flexural stresses on magma transport	
C.F. Hieronymus and D. Bercovici	539
138-121 Ma asthenospheric magmatism prior to continental break-up in the North Atlantic and geodynamic implications	
U. Schärer, J. Girardeau, G. Cornen and G. Boillot	555
The role played by a low viscosity zone under a 660 km discontinuity in regional mantle layering	
M. Kido and D.A. Yuen	573
On the rheologically critical melt fraction	
J. Renner, B. Evans and G. Hirth	585
Investigation of the He solubility in H ₂ O-CO ₂ bearing silicate liquids at moderate pressure: a new experimental method	
A. Paonita, G. Gigli, D. Gozzi, P.M. Nuccio and R. Trigila	595
Distribution and significance of extraneous argon in UHP eclogite (Sulu terrain, China): insight from in situ 40 Ar/39 Ar UV-laser ablation analysis	
D. Giorgis, M. Cosca and S. Li	603
Erratum	
Erratum to 'Finite amplitude folding: transition from exponential to layer length controlled growth'	
S.M. Schmalholz and Y.Y. Podladchikov	617
Finite amplitude folding: transition from exponential to layer length controlled growth	
S.M. Schmalholz and Y.Y. Podladchikov	619

Author Index Volume 181

635



